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| 10/566,812      | 01/25/2007  | William Stringfellow | QST.P.US0002        | 8016             |

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| EXAMINER |
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BROWN, COURTNEY A

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| ART UNIT | PAPER NUMBER |
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1616

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07/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/566,812 | <b>Applicant(s)</b><br>STRINGFELLOW, WILLIAM |  |
|                              | <b>Examiner</b><br>COURTNEY BROWN    | <b>Art Unit</b><br>1616                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 13, 15-25 and 911 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13, 15-25 and 911 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Receipt of Amendments/Remarks filed on April 7, 2008 is acknowledged. Claims 8, 10, and 14 stand cancelled. Claims 1, 7, 9, and 13 were amended. Claims 23-24 were added. Claims 1-7, 9, 11-13, 15-25 are pending and are being examined for patentability.

#### ***Priority***

Priority to International Foreign Application PCT/US04/25498 and Provisional Applications 60/493,636 and 60/493,637 filed on August 8, 2003 is acknowledged.

Rejections and/or objections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim1, the phrase "including" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "including"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d). According to Merriam-Webster's Online Dictionary, the term "including" means to **take in or comprise as a part of a whole or group**. This implies that something else is included besides what is being recited in the claim.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-7, 9, 11-13, 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riego et al. (US 6,040,272) in view of Esposito (US 4,822,407) and Hofer (US 6,500,416 B2).

### ***Applicant's Invention***

Applicant claims a method for applying a fungicide to a tree comprising applying an aqueous insecticide or a plant growth regulator composition to the bark periderm of woody plants without mechanically penetrating or piercing the bark of the plant. The insecticide or plant growth regulator composition includes: (a). an insecticide or plant growth regulator; (b). a polyoxyethylene heptamethyl trisiloxane surfactant that is from about 0.003 to 0.05 parts by weight per part of insecticide or plant growth regulator; and (c) water. Applicant additionally claims the composition as stated above with these optional components: (d). a surface active agent such as propylene glycol that is from about 0.0001 to 2 parts by weight; and; (e). solvents selected from the group consisting of alcohols, glycols, and glycol esters that is from about 0.2221 to 2 parts by weight. Applicant also claims a method for applying a fungicide to a tree comprising spraying the insecticide or plant growth regulator composition on the bark periderm (which consist that portion between the root flare and the first branch) 50-75 grams of insecticide or plant growth regulator to six feet of a tree, measured from the base, where the face has a diameter breast height of about six inches and 25-125 grams of the insecticide or plant growth regulator composition to six feet of a tree, measured from the base where the tree has a diameter breast height of about six inches to where it will run off the bark.

***Determination of the scope and the content of the prior art  
(MPEP 2141.01)***

Riego et al. teach a herbicidal composition applied to bark in basal (bark periderm) and dormant stem regions of plants (abstract). Riego et al. teach a composition that preferably comprises about 5-35% by weight polyoxyethylene heptamethyl trisiloxanes (column 3, lines 6-8 and column 5, line 33); 50-95% of a glycol or glycol ester such as diethylene glycol and propylene glycol (column 3, lines 22-25 and column 5, lines 50-52), and "pour point depressants" (solvents) such as methanol, ethanol, and n-propanol (column 7, lines 46-52). Riego et al. teach that the composition could be applied to the bark of basal stem portions of plants (bark periderm) employing backpack sprayers (column 7, lines 45-52 and column 8, lines 3-5). Additionally, in column 8, lines 49-52, Riego et al. teach applying the composition to the bark from the waist or knee height to ground level, and applying sufficient solution to wet the bark to the point of run-off. Additionally, Riego et al. teach the use of herbicides that are water-soluble and has herbicidal activity against woody, brush or arborescent plants , preferably, a water-soluble salt of N-phosphonomethylglycine (glyphosate), 2,4-dichlorophenoxyacetic acid (2,4-D), dicamba, triclopyr or imazapyr (column 3, lines 52-60, claims 1 and 24 auxin plant growth regulator of instant application).

***Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)***

The difference between the invention of the instant application and that of Riego et al. is that the instant invention requires the use of an insecticide component, specifically acetamiprid and imidacloprid. For this reason, the teachings of Esposito and Hofer et al. are joined. Esposito teaches a diluent composition which includes the use of insecticides and is capable of penetrating tree bark and woody plant tissue (abstract). Esposito also teaches employing the mixture using standard spray equipment (column 4, lines 24-25). Hofer et al. teach a flowable composition for controlling harmful insects (abstract). Hofer et al. teach the use of acetamiprid (column 8, line 10, claims 23 and 25 of instant application).

***Finding of prima facie obviousness***

***Rationale and Motivation (MPEP 2142-2143)***

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of Riego et al., Esposito, and Hofer et al. to devise a method for applying a fungicide to a tree comprising applying an insecticide or plant growth regulator composition to the bark periderm of woody plants without mechanically penetrating or piercing the bark of the plant. One would be motivated to



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combine these teachings because herbicides and insecticides are both classified as pesticides and are used to control organisms which are considered harmful. One would have been motivated to make this combination in order to receive the expected benefit of having a method wherein trees are duly protected from harmful weeds and insects. "It would be prima facie obvious to combine methods each of which is taught by the prior art to be useful for the same purpose in order to form a resultant method that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in prior art." In re Kerkhoven, 205 USPQ 1069 (C.C.P.A. 1980).

### ***Examiner's Response to Applicant's Remarks***

Applicant's arguments filed on April 7, 2008 have been fully considered but they are not persuasive. Applicant argues that one of ordinary skill in the art would not be inclined to combine the teachings of Esposito and Riego et al. because Esposito teaches oil dilutant and Riego et al. teach aqueous herbicidal compositions. However, the secondary teaching of Esposito was brought in to show that the use of insecticides for penetrating tree bark was known at the time of the instant invention. Hence, whether the formulation being aqueous or an oil dilutant would not preclude one of ordinary skill from its selection.

Additionally, Applicant maintains that the claimed invention is patentable over Riego and that there is no teaching or suggestion that the organosiloxanes described could be employed to achieve through-bark penetration of any other chemical such as an insecticide or a plant growth regulator. However, Riego et al. do disclose a herbicidal composition applied to bark in basal (bark periderm) and dormant stem regions of plants (abstract). Riego et al. teach a composition that preferably comprises about 5-35% by weight polyoxyethylene heptamethyl trisiloxanes (column 3, lines 6-8 and column 5, line 33). Additionally, Riego et al. teach the use of herbicides that are water-soluble and has herbicidal activity against woody, brush or arborescent plants, preferably, a water-soluble salt of N-phosphonomethylglycine (glyphosate), 2,4-dichlorophenoxyacetic acid (2,4-D), dicamba, triclopyr or imazapyr (column 3, lines 52-60, claims 1 and 24 auxin plant growth regulator of instant application). Therefore, the Examiner has established that the claimed method of applying a fungicide to a tree is prima facie obvious over Riego et al in view of Esposito and Hofer et al.

***Examiner's Response to the 37 C.F.R. Declarations  
Of Todd O'Connell and Franklin E. Sexton***

The 37 C.F.R. Declarations of Todd O'Connell and Franklin E. Sexton have been fully considered but they are not persuasive because they are opinion affidavits and are therefore are accorded no patentable weight.

### ***Conclusion***

None of the claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR Only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

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Should you have questions on access to the Private PAIR system, contact the Electron Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Courtney Brown, whose telephone number is 571-270-3284. The examiner can normally be reached on Monday-Friday from 8 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Courtney A. Brown  
Patent Examiner  
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/Johann R. Richter/  
Supervisory Patent Examiner, Art Unit 1616